

ABSTRACT

According to an embodiment, a semiconductor die has a source bond pad and a destination bond pad attached to a top surface of the semiconductor die. A stud bump is situated on the destination bond pad. A bonding wire is then ball bonded to the source
5 bond pad and thereafter stitch bonded to the stud bump on the destination bond pad. The bonding wire acts as an off-chip inductor or a portion of an off-chip inductor. In one embodiment a number of bonding wires and on chip conductors are used to form an off-chip inductor. The inductance of the off-chip inductor can be adjusted or fine-tuned by adjusting a loop height of the one or more bonding wires used in the off-chip inductor.
10 The inductance of the invention's off-chip inductor can also be adjusted by increasing or decreasing the number of bonding wires used to form the off-chip inductor.